

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

Please cancel claims 1 and 8 without prejudice.

1. (CANCELED)

2. (CANCELED)

3. (CANCELED)

4. (CANCELED)

5. (CANCELED)

6. (CURRENTLY AMENDED) The apparatus according to claim ~~1~~ 23, wherein said voltage generator circuit is further configured to provide substantial immunity against voltage, process and temperature variations.

7. (CURRENTLY AMENDED) The apparatus according to claim ~~1~~ 24, wherein said voltage generator circuit comprises:

a bandgap reference circuit;

a voltage reference circuit configured to generate said

5 plurality of bandgap controlled reference voltages; and

a reference switch circuit configured to switch between said plurality of bandgap controlled reference voltages to generate said reference output voltage.

8. (CANCELED)

9. (PREVIOUSLY PRESENTED) The apparatus according to claim 7, wherein said voltage reference circuit comprises:

5 a plurality of current sources configured to generate said plurality of bandgap controlled reference voltages; and

a plurality of resistors each coupled to at least one of said plurality of current sources.

10. (PREVIOUSLY PRESENTED) The apparatus according to claim 7, wherein said reference switch circuit comprises:

5 a plurality of switches each (i) configured to receive at least one of said plurality of bandgap controlled reference voltages and (ii) coupled to said reference output voltage.

11. (ORIGINAL) The apparatus according to claim 10, wherein said plurality of switches are configured in response to said output voltage.

12. (CURRENTLY AMENDED) The apparatus according to claim ~~22~~ 23, wherein said plurality of reference voltages comprise bandgap controlled voltages.

13. (CURRENTLY AMENDED) An apparatus comprising:

means for using a voltage generator circuit for selecting a reference output voltage from a plurality of bandgap controlled reference voltages in response to a feedback of an output voltage signal; and

means for using a comparator circuit for generating said output voltage in response to a comparison between said reference output voltage and an unknown voltage, wherein said output voltage comprises ~~hysteresis~~ accurately controlled ~~externally to said~~ comparator circuit hysteresis and (ii) said means for using a voltage generator circuit includes a summation means for controlling a voltage reference means in response to signals from a process compensation means and a reference means.

14. (CURRENTLY AMENDED) A method for providing accurate and controlled hysteresis comprising the steps of:

(A) using a voltage generator circuit for selecting a reference output voltage from a plurality of bandgap controlled reference voltages in response to a feedback of an output signal; and

(B) using a comparator circuit for generating said output voltage in response to a comparison between said reference output voltage and an unknown voltage, wherein (i) said output voltage comprises ~~hysteresis~~ accurately controlled ~~externally to said comparator circuit~~ hysteresis and (ii) step (A) uses a summation circuit to control a voltage reference circuit in

response to signals from a process compensation circuit and a reference circuit.

15. (PREVIOUSLY PRESENTED) The method according to claim 14, wherein step (A) further comprises:

switching between said plurality of bandgap controlled reference voltages.

16. (PREVIOUSLY PRESENTED) The method according to claim 14, wherein step (A) further comprises:

controlling a voltage level of said plurality of bandgap controlled reference voltages.

17. (CANCELED)

18. (CANCELED)

19. (ORIGINAL) The method according to claim 14, wherein step (B) is further responsive to voltage and temperature variations.

20. (ORIGINAL) The method according to claim 14, wherein step (A) further comprises the sub-steps of:

(A-1) summing a positive temperature coefficient and a negative temperature coefficient; and

5 (A-2) controlling a voltage level of said plurality
of reference voltages.

21. (CANCELED)

22. (PREVIOUSLY PRESENTED) An apparatus comprising:
a first circuit configured to generate a reference output
voltage in response to a plurality of reference voltages; and
a second circuit configured to generate an output voltage
5 in response to a comparison between said reference output voltage
and an unknown voltage, wherein (i) said output voltage comprises
accurately controlled hysteresis and (ii) said first circuit
includes a summation circuit configured to control a voltage
reference circuit in response to signals from a process
10 compensation circuit and a reference circuit.

23. (NEW) The apparatus according to claim 22, wherein:
said first circuit comprises a voltage generator circuit;
and
said second circuit comprises a comparator circuit.

24. (NEW) The apparatus according to claim 23, wherein
said plurality of reference voltages comprise a plurality of
bandgap controlled reference voltages.